

Rec'd PCT/PTO 17 JUN 2005

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
8 July 2004 (08.07.2004)

PCT

(10) International Publication Number
WO 2004/056325 A1

(51) International Patent Classification⁷: A61K 6/083 (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW.

(21) International Application Number: PCT/AU2003/001713 (84) Designated States (*regional*): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(22) International Filing Date: 22 December 2003 (22.12.2003) (25) Filing Language: English (26) Publication Language: English

(30) Priority Data: 2002953460 20 December 2002 (20.12.2002) AU (71) Applicant (*for all designated States except US*): NSI DENTAL PTY LIMITED [AU/AU]; Unit 7, 42 Leighton Place, Hornsby, NSW 2077 (AU). (72) Inventor; and (75) Inventor/Applicant (*for US only*): BANNISTER, Dennis, James [AU/AU]; 81 Grays Lane, Canebrook, NSW 2749 (AU). (74) Agent: WATERMARK PATENT & TRADEMARK ATTORNEYS; Bldg 1, Binary Centre, Riverside Corporate Park, 3 Richardson Place, North Ryde, NSW 2113 (AU).

Published:
— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

WO 2004/056325 A1

(54) Title: DENTAL FORMULATION

(57) Abstract: This invention relates to formulations for treating or reducing dentine hypersensitivity that causes pain arising from exposed dentine in the oral cavity. The present invention seeks to provide formulations for physical blockage of dentinal tubules that have long term effectiveness and cause minimal irritation (if any at all) to the tissues of the oral cavity. Preferred formulations should be easy to apply, be immediately effective and maintain dentinal tubule occlusion under normal teeth cleaning regimes that include regular tooth brushing. The invention provides a formulation for reducing dentine sensitivity in the oral cavity, which incorporates at least one physical desensitising agent in form of a light curable monomer that forms a resilient polymer gel upon curing.

BEST AVAILABLE COPY